

7.1 Review Questions

1. Put the name of the scientist next to the model of the atom that he devised.

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| a. Democritus | 1. First said an atom is mostly empty space. |
| b. Dalton | 2. First to use the term atom. |
| c. Thomson | 3. Called his atom, "Plum pudding with raisins" |
| d. Rutherford | 4. Put the electrons in specific energy levels. |
| e. Bohr | 5. Thought the atom was a tiny sphere. |

2. What was the significance of Rutherford's Gold Foil Experiment?

3. How was Thomson's model of the atom different than Dalton's model?

4. What was the evidence that helped Rutherford create his model of the atom?

5. Describe what you might see if you looked at the following things through a spectroscope.

- a. a light bulb
- b. reflected sunlight
- c. a neon light

6. Draw the Bohr model for the following atoms.

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| a. Sodium (Na) | b. Oxygen (O) |
| c. Krypton (Kr) | d. Gold (Au) |
| e. Uranium (U) | f. Mercury (Hg) |

7. Draw the Bohr Model for the following atoms:

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| a. Lithium (Li) | b. Vanadium (V) |
| c. Palladium (Pd) | d. Bismuth (Bi) |